

**New Hampshire Department of Transportation
Bureau of Materials & Research**

Qualified Products List (QPL) – Qualification Criteria

Section 528 – Prestressed Concrete Members, NHDOT Specifications

QPL Category: 528.A. – High Strength, Impact Resistant, Non-Shrink Grout

Product Requirements

Product Description

A high strength, impact resistant, non-shrink grout shall be comprised of materials specifically for use with prestressed concrete members. The grout shall be non-shrink, non-metallic, non-chloride, and non-gypsum.

Laboratory Test Performance

High Strength, Impact Resistant, Non-Shrink Grout		
Property	Test Method	Requirement
Length Change	Direct Measurement -or- AASHTO T 160	± 0.1%
Compressive Strength, 1 Hour Compressive Strength, 3 Hour Compressive Strength, 1 Day Compressive Strength, 7 Day Compressive Strength, 28 Day	AASHTO T 106*	Reported Reported 2000 psi min. 6000 psi min. ≥ 7 Day Strength
Freeze – Thaw, Allowable Weight Loss	AASHTO T 161, Procedure A**	1% max.
Relative Dynamic Modulus of Elasticity	AASHTO T 161, Procedure A**	95% min.
Permeability	AASHTO T 277***	Reported

* Modified: a) The grout will consist only of the cementation material submitted for testing (i.e. no additional aggregate will be added). The grout will be mixed using the maximum amount of water and/or admixture recommended by the manufacturer. B) The mixing time shall conform to manufacturer recommendations. C) Tests shall be conducted on three specimens.

** Two specimens at 300 cycles each.

*** Three specimens tested.

Required Submissions

Only complete product submittal packets will be considered for review.

QPL Product Submittal Form

The submitted form must be the current, on-line version of the form, and must be completely filled out. It can be accessed here: <https://www.nh.gov/dot/org/projectdevelopment/materials/research/products.htm>.

Letter of Compliance

A Notarized letter on the manufacturer's letterhead affirming the product meets all Department requirements described herein.

Product Literature

All current product literature, including technical data sheets and Safety Data Sheets (SDS), relevant to the material's use, limitations, material properties, storage, mixing, application/installation, and all precautions for the product, as applicable.

Laboratory Test Results

Product submittals without laboratory test documentation will not be reviewed.

Laboratory Testing

As part of the evaluation, the Department will review the submitted, required, laboratory test results. Laboratory testing may be conducted through the AASHTO National Transportation Product Evaluation Program (NTPEP), a State transportation agency, or appropriately qualified independent testing laboratory. Test results must be submitted on the testing laboratory's letterhead and the documentation demonstrating that the product meets these requirements must be legible and current. Qualifications of the independent laboratory must also be submitted for review.

QPL Expiration Date / Product Test Frequency

A qualified product is listed until the expiration date noted in the QPL. Products without current acceptable laboratory results will be removed. To remain listed in the QPL, manufacturers are required to submit laboratory field test documentation verifying conformance with the qualification criteria *every 5 years*. High Strength, Impact Resistant, Non-Shrink Grout products that have not been laboratory tested in accordance with this requirement will not be evaluated.

Product Performance Monitoring/Removal from QPL

Product field performance and the product's technical data will be monitored by the Department. If either fails to meet the criteria noted herein, the product will be immediately removed from the QPL without notice to the manufacturer.

Changes to Product Name, Manufacturer, or Formulation, of a Currently-Listed QPL Product

The Department's Product Evaluation Unit (PEU) shall be contacted immediately when a change to any of the following is made to a product currently listed in the QPL:

- Product Name
- Product Manufacturer
- Product Formulation

For a change in the product name and/or manufacturer, the product will remain in the QPL reflecting that change upon receipt of verification from the current or new manufacturer attesting the product formulation is unchanged. Verification shall consist of a letter signed by the manufacturer's representative.

For a change in product formulation, the PEU will determine whether:

- 1.) The formulation change could adversely affect the product's required performance, whereupon it will be subject to removal from the QPL; or -
- 2.) The formulation change will not adversely affect the required performance of the product for its intended use; whereupon, the product will remain in the QPL.

If at any time it is determined that a product name, manufacturer, or formulation has changed without the required notification to the PEU, the product is subject to immediate removal from the QPL at the discretion of the Product Evaluation Unit. The product will not be re-listed in the QPL until the manufacturer provides the proper notification.

Product Marking and Labeling

The product label shall be marked with the information as required by the applicable specification(s).

If a product was converted and/or relabeled from its original manufacturer, the product name on the packaging and all accompanying literature shall be that of the convertor or private label company.

Limitations

The Department continues to evaluate its qualification criteria as well as products that have been qualified against them, and reserves the right to revise the criteria and/or withdraw product qualification at any time for any reason without notice. Qualification of a product does not constitute an endorsement of the product, nor does it imply intent to purchase or specify the product.

Qualification Criteria Approved by:



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